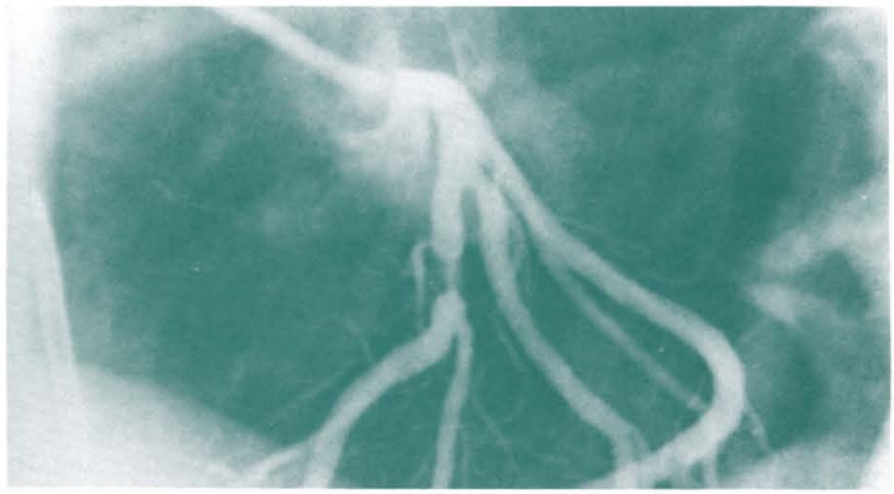
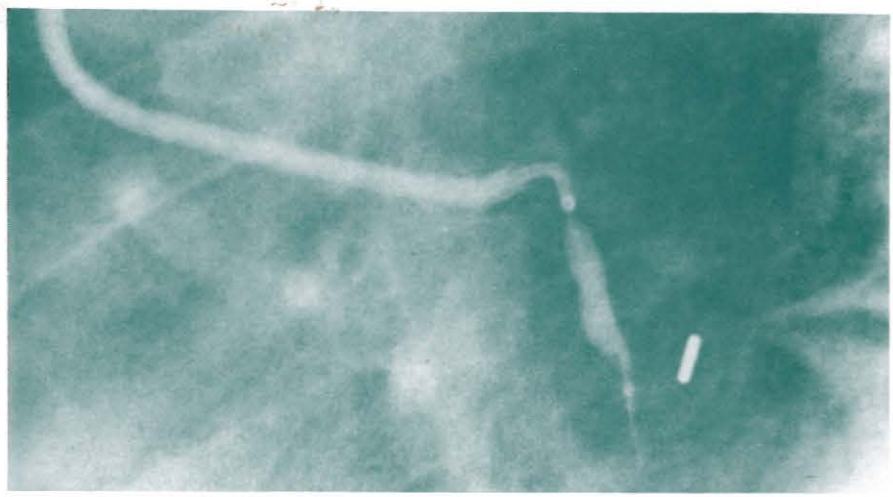
U.S. NAVY MEDICINE

December 1981

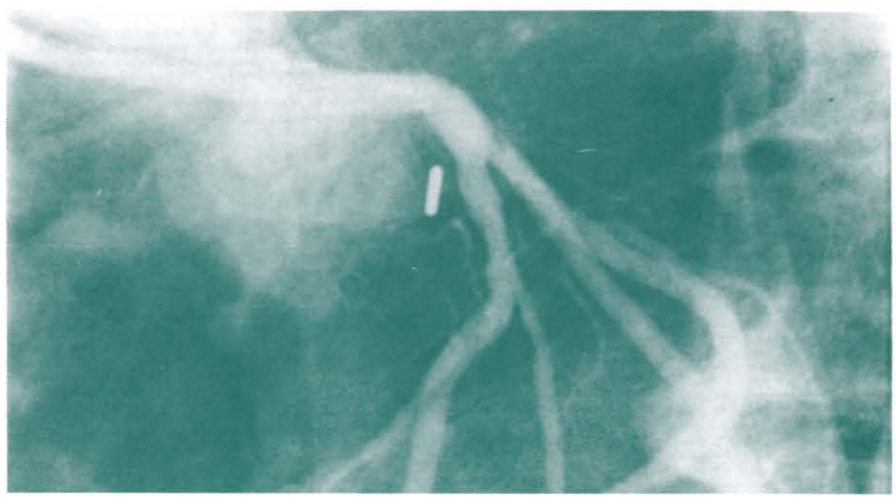
Predilation



Balloon Dilation



Postdilation



POLICY: *U.S. Navy Medicine* is an official publication of the Navy Medical Department published by the Bureau of Medicine and Surgery. It disseminates to Navy Medical Department personnel official and professional information relative to medicine, dentistry, and the allied health sciences. Opinions expressed are those of the authors and do not necessarily represent the official position of the Department of the Navy, the Bureau of Medicine and Surgery, or any other governmental department or agency. Trade names are used for identification only and do not represent an endorsement by the Department of the Navy or the Bureau of Medicine and Surgery. Although *U.S. Navy Medicine* may cite or extract from directives, official authority for action should be obtained from the cited reference.

DISTRIBUTION: *U.S. Navy Medicine* is distributed to active-duty Medical Department personnel via the Standard Navy Distribution List. The following distribution is authorized: one copy for each Medical, Dental, Medical Service, and Nurse Corps officer; one copy for each 10 enlisted Medical Department members. Requests to increase or decrease the number of allotted copies should be forwarded to *U.S. Navy Medicine* via the local command.

CORRESPONDENCE: All correspondence should be addressed to: Editor, *U.S. Navy Medicine*, Department of the Navy, Bureau of Medicine and Surgery (MED 00C10), Washington, DC 20372. Telephone: (Area Code 202) 254-4253, 254-4316; Autovon 294-4253, 294-4316. Contributions from the field are welcome and will be published as space permits, subject to editing and possible abridgment.

The issuance of this publication is approved in accordance with Department of the Navy Publications and Printing Regulations (NAVEXOS P-35).

NAVMED P-5088

U.S. NAVY MEDICINE

Vol. 72, No. 12
December 1981

COVER: Atherosclerosis, the occlusion of arteries by plaque-like substances like cholesterol, can sometimes be treated without surgery. In these instances, the treatment of choice may be catheterization and transluminal compression. Such a case is the subject of this month's cover story on page 20.

MASH, Dental Style

Everyone is familiar with the 4077th MASH, but what you might not know is that the Navy Dental Corps has an equivalent—Fleet Marine Force Dental Companies. FMF dental companies are assigned to support Marine units both in garrison and on deployments. Garrison support is no different than services offered by any other dental clinic. Support on deployment requires a unique approach to dentistry. It demands a dental company be mobile, versatile, and be able to move where the Marines must go. This article focuses on the field dental exercise of one such company.

The 21st Dental Company is stationed at Marine Corps Air Station Kaneohe Bay, HI, as an FMF unit in support of the 1st Marine Brigade. The 21st Dental Company's field training, until recently, was devoted to setting up its field equipment outside the permanent dental clinic.

The 21st decided to test its ability to provide true field dental support when it learned that an infantry battalion was going to the field for a combat readiness exercise. This was a chance to see how the dental company could operate in the field, away from their home base and be self-sufficient.

Four dentists, six technicians, and a Marine driver were to take part in the two-week exercise. A personnel change would be made after the first week to give the maximum number of people a chance to participate in field training.

FMF dental companies utilize special equipment to support such missions. This equipment is drawn from an Authorized Dental Allowance List (ADAL) which this FMF dental company maintains.

ADAL equipment is efficient, compact, and ready for transport and use in a short period of time. Each dentist is assigned 662 ADAL gear which includes the following: air compressor, dental chair and light, an assistant and dentist stool, dental cabinet supplied with instruments, sterilizer, and a dental unit.

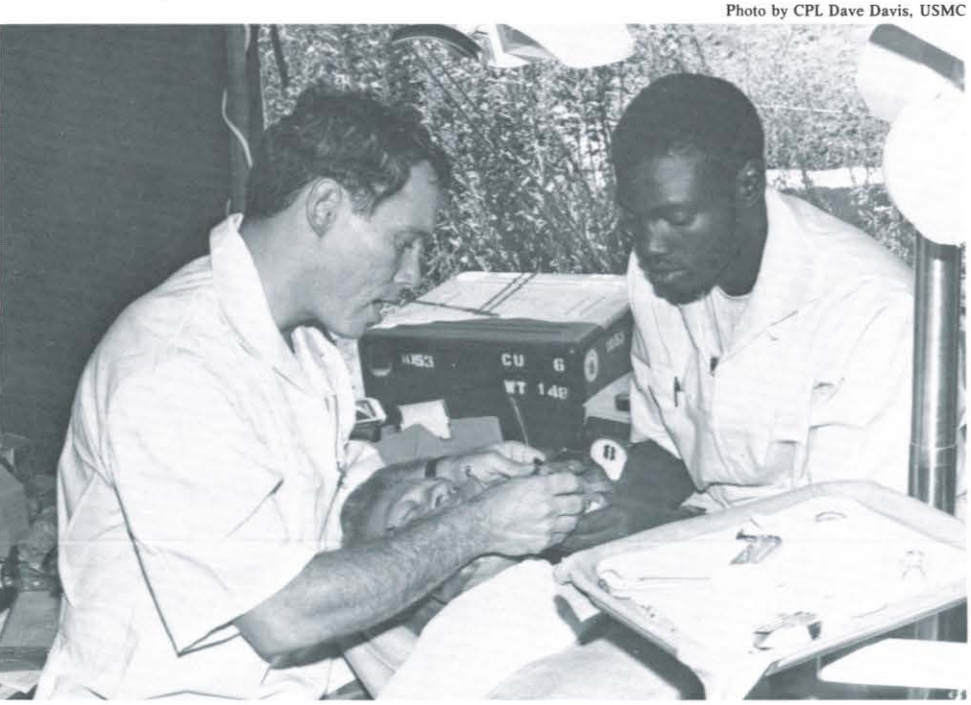
The consumable items (such as anesthesia, patient napkins, administrative forms, etc.) to operate for 60 days are included in 663 ADAL gear which each dentist also receives.

A group of dentists shares 664 ADAL gear: field sink, portable x-ray machine, hand developer, prosthetic block, endo block, oral surgery block, and small refrigerator. They also share 665 ADAL gear, the consumable supplies for the 664 that the dentists need to operate for 60 days.

All other supporting equipment like generators, trucks, tents, sleeping bags, and cots are provided by the Brigade Service Support Group of the 1st Marine Brigade.

The combat readiness exercise was at Pohakuloa Training Area, an Army facility on the island of Hawaii. The area is rough and harsh, 30 miles from inhabited areas, covered with lava rocks and dust. This provides the dental company and Marines a perfect environment to conduct field maneuvers.

Photo by CPL Dave Davis, USMC



LCDR Michael Rocklin (left) and his assistant, DT3 Joseph Triplett, Jr., perform emergency field dental repair.

Before deploying, rosters were obtained for all Marines going on the exercise. Their dental records were screened and class three patients were identified and appointed through company commanders.

The direction of treatment was simply to change class three patients into class one patients.

The first shift flew by C-140 from MCAS Kaneohe Bay to Hilo International Airport and arrived at PTA (Pohakuloa Training Area) by truck convoy. The dental equipment shipped earlier by barge and truck was unloaded at the predesignated site of the clinic. Within three hours, the tents were erected and equipment was unpacked and checked. One large tent served as a treatment area and each dentist set up his operatory in a corner. A field sink and sterilizer sat in the middle. Another large tent became a waiting room with a portion devoted to x-rays. A command post tent doubled as a lounge and sleeping quarters for duty technicians.

Although the dental personnel worked the same hours in the field as it had in garrison, they learned that life in the field is quite different from that at home. Quonset huts served as the berthing area on this exercise. The men ate breakfast and dinner in the chow hall with c-rations being the order of the day for lunch.

At night the dental company went to the field to observe Marines performing combat exercises. Company commanders gave briefings on assault and defense positions and allowed doctors and technicians to fire weapons, including the M-16 rifle, M-60 machinegun, and 203 grenade launcher.

As the first week ended the second group arrived by helicopter. Never was the clinic morale higher than at that meeting. The first group had worked hard and was ready to go home; the second group was eager to start. Both groups developed a great respect for the Marines. Their support and consideration of the clinic created a sense of unity which made the company feel an important part of the Marine/Navy team.

By going to the field, the dental company reinforced a number of important concepts:

• Field dentistry produces unusual problems not encountered in a permanent clinic. Materials hardened much faster in a hot tent. Back fatigue occurred quickly with no back support. The rough ground made it difficult to maneuver a chair into proper working positions. Constant wind and dust led to irritated eyes, chapped lips, and a real problem in maintaining the cleanliness of working areas.

• ADAL equipment is tough and dependable. With only minor adjustments, all equipment remained on the line and in good working order. This was no small accomplishment considering the tremendous amounts of dust and dirt to which it was exposed.

By the close of the second week, the dental company had seen 128 class three patients and converted 91 of them to class one. The remaining 37 were within one or two points of that status.

By the time the 21st Dental Company returned to Kaneohe, the two shifts had performed more than 800 surfaces of restorations, completed two endo cases, and treated two impactions. In completing their mission, they were confident that when called upon in the future they would be ready.

—Story by LT Edward Neupert, DC, USNR □

Dental treatment tent

Photo by DT3 Max Mareno, USN

Spin-Offs of a Nurse Staffing Research Study

CAPT Mary Kelly, NC, USN

The Research Department of the Naval School of Health Sciences, Bethesda, MD (RDNSHS), recently completed a two-year study designed to establish the relationship between difficulty of nursing personnel assignments and quality of patient care. The purpose was to determine if daily changes in staffing of nursing personnel relative to patient care workload have a measurable effect on the quality of care received by patients. Although no practically significant relationship was found, some valuable instruments were developed and adapted to aid in staffing decisions and quality assessment.

Patient Classification

There are four patient classification systems being used in Navy hospitals. The Naval School of Health Sciences (NSHS) system used at several hospitals divides patients into four categories ranging from minimal to intensive care. In this system, adapted from Medicus Microsystems, Inc., specific weighted condition indicators are identified and the weights summed for each patient to determine that patient's classification. (*1*)

The system at NNMC was adapted from the Walter Reed Army Medical Center. It presently has three patient categories: I, II, and III. Points are assigned according to the level of nursing assistance required in eight areas of need and the points added to determine the patient's classification. There are also 17 specific condition indicators, any one of which automatically places a patient in a particular category.

The classification system at NRMC San Diego, divides patients into three categories: minimal, moderate, and total care. The patient's category is determined by deciding the level of nursing assistance required in four areas of care and adding the points for all areas.

NRMC Oakland, uses Patient Dependency Categorization Guidelines separating patients into four categories: I, II, III, and IV. The level of assistance required is determined for eight areas of care and the modal level is chosen as the patient's classification. In the event of a tie, such as four class II and four class III responses, the response for general health is used as the determining factor in choosing the patient's classification.

RDNSHS conducted validity and reliability tests for the NSHS, NNMC, and San Diego classification systems. (*2*) Validity, as used here, refers to the ability of the system to separate patients into relatively homogeneous groups with respect to nursing care needs. Reliability refers to the consistency with which the system is applied by the nursing personnel responsible for its use. It appears that the three systems classify patients reasonably well and can be used as part of a nursing personnel staffing system. The Oakland method was tested separately, and comparison of results with those of the other systems is not feasible. Practically speaking, it appears to classify patients to the satisfaction of nursing personnel at Oakland.

Testing of the four classification systems for ease of use, consistency of classification, and user acceptability was completed in the spring of 1981.

Work Sampling

Nurses frequently complain of the time spent in non-nursing activities to the detriment of patient-centered or direct patient care time. We are often criticized for our emotional approach when arguing for changes in numbers or types of personnel. Objective information gained by work sampling can assist in changing the argument from "My nurses spend too much time answering the phone" to "I have documentation that X percent of the charge nurse's time is spent answering the phone."

The information gained from work sampling can be used to justify requests for ward clerks, transportation aides, and housekeeping personnel. It may lead to the decision to change traditional time for performing certain activities or to hire part-time personnel to cover particularly heavy times of the day. It may assist in obtaining new or better support from other departments, and more particu-

CAPT Kelly is Assistant Director, Nursing Service, NNMC Bethesda, MD 20814.

larly, it may be used in developing time requirements for use in a staffing system for nursing personnel.

Work Sampling Methodology

Work sampling may be performed by an RN following a methodology recommended by the Department of Health, Education and Welfare, Division of Nursing. (*3*) Instantaneous observations of nursing personnel activities are made and recorded approximately every 10 minutes. Coding of these activities can either be broad or detailed according to the purpose of the data collection. If you need only know the percentage of time spent in patient-centered vs. nonpatient-centered activities, coding can be broad. If, however, you must determine the amount of time spent in various activities such as continuing education, counseling, transportation, clerical duties, etc., then detailed coding will be required. To determine the percentage of time spent in direct patient care activities per category of patient, it is necessary to identify the patient for whom the activity is being performed and to have the patients classified.

Specific details of the work sampling methodology can be obtained from references (3) and (4).

Quality Assessment

The process-oriented quality assessment instrument used in the RDNSHS study was developed at Rush-Presbyterian/St. Luke's Medical Center in Chicago in conjunction with the Medicus Systems Corporation. (*5*) It consists of some 250 questions assessing quality of patient care in 6 major categories and 27 subcategories of nursing function.

Interviewing patients and nurses, reviewing inpatient record and nursing care plans, and observing the patient's immediate environment and the unit in general provides the necessary information to complete the questionnaire. The questionnaire is reasonably easy to use and the time required will depend on the type of information being sought. It has six categories of care and is designed so that questions can be asked from any one category or from several or all categories. There are also specific questions concerning the nursery and recovery room.

Used in an informal manner where statistical validity is not an issue, this quality questionnaire can provide nursing personnel with information in specific areas such as safety and infection control, documentation of care, assessment and care planning, patient perceptions of care, and a variety of other areas.

Questions dealing with patient perceptions ask whether patients are satisfied with their care. Safety-oriented questions may be helpful in identifying the source of an increase in incident/accident reports. Information about charting of nursing notes will highlight specific strengths and weaknesses. Questions dealing with admissions offer an opportunity to gain valuable information about this particularly sensitive time in the patient's hospitalization. The assessment and care planning questions can assist in determining whether an increase in the number of RNs has resulted in improvement in this important area of professional nursing responsibility.

Because of its ability to address specific areas of nursing function, the quality questionnaire can assist the nursing education department in determining areas of need for in-service education. It can also give the charge nurses and supervisors reference to specific examples during staff counseling sessions. It would be a valuable adjunct to a nursing service quality assurance program.

More information on the instruments developed in this study and their use may be obtained from the Research Department, Naval School of Health Sciences, Bethesda, MD 20814.

References

1. Kelly M, Montgomery JE: Patient classification: The first step toward a nurse staffing system. *US Nav Med* 71(8):5-9, 1980.

2. Montgomery JE, Kelly M: *Validity and Reliability Testing of Three Naval Hospital Patient Classification Systems.* Research Department, Naval School of Health Sciences, NNMC Bethesda, MD 20814, April 1980.

3. *How to Study Nursing Activities in a Patient Unit,* DHEW, Division of Nursing (PHS Publication 370), Revised 1964.

4. Kelly M, Montgomery JE: *Development of Staffing Formulas for Nursing Personnel Based on Patient Classification.* Research Department, Naval School of Health Sciences, NNMC Bethesda, MD 20814, May 1980.

5. Jelinek RC, et al: *A Methodology for Monitoring Quality of Nursing Care.* DHEW Publication (HRA) 76-25, January 1974. □

Addendum

U.S. Navy Medicine would like to acknowledge the significant contributions of LCDR Donald C. Arthur, MC, USN, to the Computer Assisted Medical Diagnosis Program (November 1981 *U.S. Navy Medicine*). The data sheet on page 8 was also prepared by Dr. Arthur.

Focus on Family Advocacy

CDR Eli Breger, MC, USNR

Child Abuse and Strategies for Navy Health Care Professionals Working With Abusive Parents

Part one of a three-part series

Shock is a customary response to hearing of a parent physically abusing a child. How can such a thing occur? This disbelieving reaction of people who do not abuse is understandable. Such degrees of anger and aggression directed toward a young child are totally foreign and objectionable to the majority of families functioning in compatible, loving, and sharing partnerships. However, many parents whose family life is beset with chronic discontent, discord, and domestic violence know the impulse or reality of massively discharging their frustration and anger on their child.

Until recently physicians regarded cases of abuse coming before them as accidents. The medical profession reacted with disbelief to the obvious. It was only as recently as 1962 that Dr. Henry Kempe, pediatrician, clearly saw what was happening and courageously published his classic paper on the "Battered Child Syndrome." The 1960s were years for description and clarification of related family dynamics, and the 1970s corresponded to the development of treatment programs and legislation designed to protect the victims. The decade of the 1980s will likely see an entry into early identification of abuse to prevent it from becoming chronic. Even more exciting, it may become possible to predict which families are at high risk to abuse their children, thereby preventing child abuse from beginning by helping parents deal with problems.

The abusive act is a "spin-off" of a complex family situation in which parents frequently experienced abusive rearing as children. Their marriages are conflictual, unfulfilling, and under varied pressures. Unreasonable expectations of the child, his personality and/or developmental problems add to the stress. A particular crisis occurs exploding the pressured family environment and an assaultive discharge is directed against the helpless child. A typical abusing family within our naval community might appear as follows:

Seaman and Mrs. S. are young parents who married after a brief courtship. Both were raised in homes with parents who used frequent physical and, at times, abusive punishment. Seaman S. was raised by a stepfather after his parents were divorced when he was three years old; he never developed a close trusting relationship with him. Mrs. S.'s parents remained together but her father drank heavily and abused her mother. The young couple married hoping to resolve their obvious loneliness, insecurity, and need to depend on someone.

As they were not fulfilled enough within themselves to support each other, this was difficult to accomplish. Marriage found them socially isolated, distrustful of their community, and unable to support one another emotionally. To handle their frequent depressive feelings, alcohol and other substances were increasingly used. Pregnancy ensued and there was an initial burst of hope that the child would bring happiness.

Their daughter was born normally but soon developed colic and restlessness, possibly in response to the mother's tense handling and the insecure home environment. Seaman S. found it difficult to get adequate sleep and responded by staying away and drinking more at the club. The mother, alone and fatigued, turned to

Dr. Breger is Chief of the Psychiatry Service and Chairman of the Family Advocacy Committee at the Naval Hospital Beaufort, SC 29902.

the baby and unrealistically and desperately sought companionship in her infant daughter. It was difficult for her to view this dependence on her infant as inappropriate because of her own experience of being raised by an abused mother.

The couple's automobile broke down and repair costs exceeded available monies. Mrs. S. found herself more homebound and alone as Seaman S. rarely spent evenings with her. She desperately looked forward to the car repair and social diversion. Her husband didn't return home as he had promised on the evening his pay check was due and Mrs. S.'s anger and tension rose. When he finally appeared he was heavily intoxicated and had spent much of the money intended for the repairs. Mrs. S. cried, feeling despair and loneliness. Seaman S. felt shame and low self-esteem but was too proud to admit these feelings. Instead, he left the house angrily stating that he found no peace there. In desperation, Mrs. S. turned to her infant daughter for solace. The baby, sensing the mother's upset, began to cry. Suddenly, the mother lost her judgment and sense of reality, believing the baby too had turned against her. Her physical attack on the infant led to hemorrhages of the eye, bruises of the forehead, and a skull fracture. In a state of disbelief, the mother felt frightened and profoundly guilty. She brought her baby to the hospital emergency room stating that the infant accidentally fell from the crib.

This hypothetical case is created to provide the reader with commonly encountered ingredients of parent background, marital life, and triggering mechanisms which incite the abusive act. Child abuse occurs in families of all social and economic levels, educational backgrounds, races, religions, and nationalities. There is no indication child abuse occurs more frequently in the military because of its autocratic and highly disciplined structure. Given the proper circumstances, the potential to abuse children lies within all of us.

One confounding issue which has delayed recognition of child abuse has been its justification by parents who defend their action as necessary punishment. The history of civilization indicates a high level of tolerance and acceptance of physical means to deal with child-rearing and training. "Spare the rod and spoil the child" is currently believed by many families. Even when physical punishment is excessive, abusive parents resent outside community interference. They claim freedom to abuse their children because offspring belong to parents as "property." Fortunately, this view is declining.

Where does normal punishment end and child abuse begin? This is a good question often asked by parents and professionals working with families. Reviewing history we see severe maltreatment of children physically, emotionally, and through work demands. Even the willful killing of unwanted children was tolerated not that long ago. The notion that childhood should be a pleasurable, carefree, playful time in which to grow and develop is quite new and reflects society's changing psychological view as well as a lessened need to have children work and produce.

There is no full agreement as to the boundaries of acceptable punishment. Such guidelines can be established only after we orient ourselves to the meaning and nature of punishment. Many parents regard discipline and punishment as identical. They are not. However, both are involved in training of children toward socially acceptable behavior. Discipline implies teaching of and training for socialization skills not yet acquired. This requires endless repetition and patience. The major portion of our efforts should fall into this category. Parents should:

- provide appropriate models through their behavior,
- communicate to the child on an age-appropriate level what they are asking him to do,
- pay close attention, observing the child's behavior, and
- interrupt misbehavior, correcting it with word and action.

Punishment is a response to a breakdown in acquired skills. It need not be physical; it can be verbal or a facial expression of anger or disapproval. It is a parental response to socially unacceptable behavior over which parents have a right to expect the child to have gained control. An effective and reasonable approach could be first to interrupt the child's misbehavior, stating that it is unacceptable. Should the misbehavior persist despite this warning, parents should respond punitively by:

- removing the child from the situation and insisting on a "time out,"
- explaining how his behavior is inappropriate, and
- asking him to think about it.

After a period of removal from the scene, reintroduce the child to the circle when he is able to explain what he did wrong and what he has learned by it.

Wide differences exist in parents' orientation toward discipline and punishment. There are also marked differences between parents in the same family. Approaches appear to fall somewhere on a spectrum. At one end there are the liberal/democratic parents whose training is characterized by providing models, verbal appeal, verbal admonishment, and preparedness to repeat themselves patiently. At the other end lie the punitive/autocratic parents who live by the adage, "spare the rod and spoil the child." These parents operate on the punishment level rather than the discipline level. They tend to be quite physical and at times abusive. This approach is determined in the main on the upbringing of the parents. Oftentimes we interact with our children much as we were dealt

with as children by our own parents. This force is very powerful even when there is a firm desire to act differently. It is as if these early experiences have become internalized and operate beyond control of the intellectual will of the parent. This is not to say we cannot change, but only that it is difficult.

My own experience and orientation leans toward the liberal/democratic approach. Although socialization may take longer to develop, once it is accomplished it operates under the influence of love rather than fear. As a result, it is more permanent and can be relied upon as the child becomes an independent adult no longer under supervision. It also offers a brighter prospect for loving, respectful relationships between parent and child long after childhood has ended.

Regardless of one's orientation toward discipline and punishment, most reasonable people would agree that the boundaries of normal punishment enter the realm of abuse:

- when punishment results in an injury requiring medical attention,
- when an infant less than one year of age is physically punished,
- when a child is hit with a closed fist or instrument, or when kicked or thrown, and
- when burns are inflicted on a child.

It has been written by an author whose name is forgotten:

> Discipline, like the bridle in the hand of a good rider, should exercise its influence without appearing to do so; should be ever active, both as a support and as a restraint, yet seem to lie easily in the hand. It must always be ready to check or to pull up, as occasion may require; and only when the horse is a runaway should the action of the curb be perceptible.

What can a parent do to prevent himself from losing control and harming his child? Anger, even rage, is a natural human emotion demonstrated rather frequently. It is usually directed toward those we love most, with whom we are most intimately involved, and who are therefore most likely to disappoint us—our families. It is not entirely surprising that our young children become victims of our wrath. This is particularly true of young, immature parents who still feel the need for personal care and attention but who are beset with financial problems and the need to establish marital stability. With maturity they gain greater fulfillment, are able to give more of themselves to their offspring, and ask less in immediate return.

Physical abuse of a child is invariably preceded by controlled urges which should be seized upon. They are precious opportunities. One should take heed, resist the impulse, and remember that the child is a weak and vulnerable focus of a larger complex problem within oneself and one's marriage. As anger subsides and rational thought returns, evaluate the situation. The following is a list of meaningful factors which may predispose one to be abusive. Awareness of these factors should help one gain insight and therefore control over destructive rage impulses. The following questions posed to abusive parents and the ensuing strategies may prove helpful to Navy health care professionals.

- Were you physically abused as a child or did you witness abuse of other family members? The force of such experiences imprints on early development and often returns when, as a parent, you are confronted with issues of child training and disciplining. Struggle against this force. Strive to train by your example, by verbal admonishment, by separating child from family, and by other nonphysical ways. Do not raise your child by the motto, "Spare the rod and spoil the child."
- Are you by nature impulsive and prone to poor self-control? Do you respond to stress with aggressive outbursts? If so, rely on these time-proven methods of self-control: count to 10 and take a walk; never strike a child in anger. If self-control problems persist, consider counseling to help you understand its underlying causes and develop eventual control.
- Do you feel unable to give so much care and attention to your child because you feel in need of nurturent care yourself? An adult cannot go backward to fill up with emotional supplies he should have received as a child. Adults gain satisfaction through meaningful and satisfying relationships with adult loved ones. Do not look to your young child for the kind of love and support he cannot give. This reversal of parent/child roles and the subsequent disappointment can trigger your lashing out.
- Are you and your spouse supportive of one another during times of stress? Do you help each other with your child's care and illnesses? Feeling alone and abandoned with a cranky child can lead to lashing out abusively at the child. Spouses should strive to communicate with each other about this issue. If necessary seek counseling.
- Are you often alone with your child without adequate adult companionship? This can be particularly stressful if your spouse deliberately avoids home. This lonely despair can lead you to seek companionship in your child who cannot emotionally fulfill this adult void. The disappointment can set off an abusive outburst. The hallmark of a successful marriage is togetherness supplemented by the companionship of friends, neighbors, church group, and family members should they live nearby. Adult companionship is needed to counteract the daily rigors of child care.
- Are you beset by serious economic pressures that appear insurmountable? Your youngster, in his

own response to family tension, becomes irritable or stubborn. These burdens often cause frustration and tension which can trigger an abusive outbrust. Discuss such matters together, openly and constructively. Explore options, plan for debt reduction, and develop a budget. The Family Services Center can help you.

- Is your household beset with adult physical abuse? Child abuse very commonly occurs alongside spouse abuse and excessive alcohol intake. Domestic violence desperately calls for skilled individual or marital counseling. These services are available at naval medical facilities or in the community.
- Does your child have special physical, developmental, or emotional problems which make him difficult to raise? This child commonly becomes a target if other factors are present. Be on guard against this occurring.
- Are you disappointed because your child has not brought about resolution of personal problems or strengthened your shaky marriage? This disappointment in a child often makes him a target for abuse. Be mindful that a child cannot do more than bring a measure of happiness to parents. A moment's clear thinking would show that children cannot solve conflicts within their parents or their parent's marriage.

Above all, parents should be encouraged to communicate their concerns, feelings, and fears to spouses, friends, or clergymen. Make them aware of the Command Child Advocacy Committee which stands ready to help. Its purpose is to provide guidance for families and protection for children in cases of abuse or neglect. This committee works closely with many departments in the naval medical community as well as community programs including counseling services, Parents Anonymous, and parenting classes.

"Anger blows out the lamp of the mind." R.G. Ingersoll □

Accident Victim Owes Life to Quick-Acting Nurse

"I knew he was dead, but I guess human nature refused to let me accept that fact." These were LCDR Rachel Allison's thoughts remembering her reaction at the scene of an industrial accident last summer at Yokosuka Naval Base.

A forklift had turned over, pinning the driver, breaking his neck, and severely damaging his spinal cord. Allison assessed the situation and made a decision immediately. She took quick action to get the patient moved from under the forklift and to administer first aid.

Four people raised part of the forklift and held it up until LCDR Allison could apply CPR and stabilize the patient's neck so he could be taken to an ambulance.

The patient was gently moved to the ambulance and transported to NRMC Yokosuka. On the way, he began to breathe, although it was inadequate to sustain life. LCDR Allison continued to support his breathing and his neck, and once at the NRMC, the patient was further stabilized and regained consciousness in the intensive care unit. Ultimately, he was transferred to CONUS for specialized treatment and rehabilitation, accompanied by LCDR Allison.

The patient from Yokosuka has recovered steadily with only moderate loss of function of his right arm and only minimal dysfunction of his left arm. His recovery is directly attributable to the excellent care initiated by LCDR Allison and maintained by the staff of NRMC Yokosuka.

In a Letter of Commendation from CAPT J.E. Carr, MC, USN, the NRMC's Commanding Officer, LCDR Allison was cited as follows:

> "From the scene of the accident . . . (the patient) was optimally cared for, professionally stabilized and resuscitated. Moreover, he was carefully transported to his current treatment facility by one whose dedication to human welfare is typified by her chosen profession. While caring for the injured is only one facet of nursing care, you have performed the ultimate goal of all within the profession of medicine; you have retrieved a life from imminent danger and given it a chance for a future."

The Surgeon General's 13th Annual Specialties Advisory Conference and Committees' Meeting

The conference was held 21-25 Sept 1981 in Bethesda, MD. Following is an abridged selection of the remarks and presentations of specified individuals. Their comments do not necessarily reflect official views of the Navy Department or the naval service at large. —Ed.

Surgeon General's Keynote Address

VADM J. William Cox, MC, USN
Surgeon General of the Navy

This is a distinct pleasure to again be able to bring greetings to this group of superb professionals—military Medical Department officers of the U.S. Navy.

On my trips to the Oakland region, to the mid portion of the country, and to WESTPAC, I saw the products of your endeavors—the physicians, nurses, corpsmen, dentists, and allied scientists—all dual professionals. I saw them demonstrate their skills, under difficult sometimes most trying circumstances. If you had been with me, you would have a pride in the results of your labors that is unsurpassed.

That, ladies and gentlemen, is what we are all about. We share with our civilian colleagues those responsibilities for producing health care professionals dedicated to prevention of disease, to alleviation of suffering, to restoration of health, restoration of function, and to minimizing permanent disability. We go one step beyond, we are expected to do that all over the world, afloat, ashore, in CONUS, and in some of the most remote and threatening places of the globe.

The theme of this SAC conference is global readiness. The purpose of the Medical Department is to provide those definitive care skills with adequate facilities to maintain the health of the fighting force, to restore to function and duty under all circumstances of geography, under all circumstances of hostile environment, be it winter in the mountains, summer in the desert, afloat, or in fixed facilities overseas or in CONUS. We, you, and your products must be prepared.

I have watched with considerable anxiety what had happened to our nation over a period of 10 to 15 years. Time will not permit detailing it at the moment. Suffice it to say that we are an essential component of the fighting force that is the only hope for peace, a deterrent to the mischievous aggression of a very powerful and ambitious adversary.

Don't ever kid yourself that you are here only to practice medicine, surgery, intensive care nursing, preventive care medicine, or entomology. You are here to see to it that we preserve the strength of the fighting force in peace and conserve that most precious of all resources, functioning military members of the Navy and the Marine Corps anywhere in the world at peace or in combat.

VADM Cox

We have taken some very decisive steps in this need for preparedness. You will undoubtedly hear of the progress made with the program manager in the Fleet Hospital program. You will also learn of the definitive guidance we have received relative to the afloat dedicated tertiary definitive requirement. You will understand what has been done to modernize and modularize the organic facilities and supplies for the Marine amphibious forces, and you will undoubtedly recognize what has

gone on to strengthen our facilities and fixed facilities overseas.

I will go to San Diego to break ground after a long and bitter battle to conserve 1,000 emergency wartime beds and 13 operating rooms.

You have seen the magnificent, modernized replacement structure here at Bethesda and perhaps the new one in Orlando. In facilities planning we are on track. There's still a big gap, but we at least have everybody's attention and everyone understands clearly now the requirement for the continuum of care for contingency combat support.

On the personnel side, we have looked to an interservice course that you have all heard about—the so-called C-4 course at San Antonio, in which our Marines as well as our Navy physicians participate along with Air Force and Army. The course is being institutionalized for a minimum of 10 courses in the next year and possibly upward to 20 courses the following year. We hope to put at least 400 physicians through in 1982 and, hopefully, as many as 800 in 1983. The people down there take the course very seriously. From the standpoint of the goat lab, the course will assure that some mother's son in a green uniform isn't the first goat that a physician has on the beachhead. From the standpoint of learning how to stabilize patients in a very hostile environment, it was heartwarming to see the enthusiastic participation of all in attendance at that course.

You will receive some details about global readiness from the amphibious warfare group from Quantico this afternoon and more details will be discussed with you by MED-03 and by MED-11.

At this time I'd like to break away from the central theme to thank those who have been peripatetic; it's almost been have scalpel, have plaster, will travel. My thanks to our anesthesiologists, our surgeons, and our orthopedic surgeons who have willingly and effectively carried out the mission by more than their fair share of TAD to remote spots and units afloat.

The attitude that I see in the young people is the result of your precept and example. They know who they are and what they are. I have talked to young physicians aboard *White Plains, Blue Ridge,* and dentists aboard *Dixie.* I have spoken with Medical Department personnel afloat clear out to Diego Garcia. There is not a single dissatisfied professional out there. No they don't want to stay afloat all their lives. No they might not want to do it again in two or three years unless necessary, but everyone of them understands why it is necessary and enjoys being in the thick of it. I did not see a single disillusioned, disappointed product of your programs.

Current Status of Medical Department Manpower

RADM Melvin Museles, MC, USN
Assistant Chief for Professional Development, BUMED (MED 02)

I want to remind you again this year as I did last that all our education and training programs in peacetime must prepare us for the practice of medicine in any contingency situation. Let's not forget that we must train physicians for war. Not a pleasant thought, but something we must think about all the time.

This past year we have continued to ask you and your staffs for more sacrifices. We continue to have increased demands for shipboard assignments as well as requests for short tours to our isolated overseas facilities. We are exercising our MMARTS and our surgical teams more as well as our physicians assigned to FAC-U billets. For those that have served we are extremely grateful. I know how these assignments negatively affect your training programs, but they are necessary and we need your support. Our young medical officers must continue to be motivated by your leadership and your roles as senior military medical officers. "Pride and Professionalism" are the current catch words. Let's exercise them in everything we do.

I would like to spend a few minutes covering some general issues. Corrections in our billet/body match continue, both on the staff side and in GME training positions.

We had anticipated being over end strength by the end of this fiscal year, but it looks like we will end up just short of 3,600. The late implementation of the new bonus programs may have had something to do with this. Also the anticipation of being over numbers this past spring allowed us to filter our corps and disapprove extension requests from those Reserve officers who were only moderate performers. But where we were to remain at 3,600 end strength in the out years, we now expect significant increases.

This year we will still select 267 medical officers into our GME-1 programs and about 260 in GME-2 programs. Our GME programs are still 52 bodies over billets and we must get those into realignment. We made some cuts in our residency positions on the grid this year but with increased numbers of billets coming in the next few years we hope to restore those soon. We also hope to gain significant additional outservice training billets. As most of you know, the various AMA educational committees are looking at a "transitional" year between medical school and specialty training. This will be more of a broad-based year similar to the old rotating internship and should help meet our Navy needs for more than the current categorical programs. We continue to assign most of our interns to operational assignments upon completion of their GME-1. About 80 percent fall into

RADM Museles

that category now, but we are aiming for close to 100 percent in the near future. As our application rate for residency training increases we should meet that goal.

I want to remind you that when our interns complete their GME-1 year in your training programs, you have assured us at BUMED and NMPC that you are capable of being assigned anywhere as a primary care medical officer. You must see to it that this commitment is indeed met. Our interns will continue to receive their 52 hours per year of military medicine training at your hospitals and the one-week tri-service Combat Casualty Care Course in San Antonio. The C-4 course will be given 10 times this year and 20 times next year. Our ultimate goal is to have all our medical officers take this course with follow-on periodic refresher combat training required at varying intervals throughout their careers.

Our new family practice teaching program is underway at Bremerton and, although we have had some staffing problems, it will continue to grow and flourish to meet our increasing requirements for family practitioners over the next several years.

Although our scholarship students remain the primary accession program for the Medical Corps, there will be some downward adjustments in numbers over the next few years. Next year our numbers will go down by 40. The USUHS (Uniformed Services University of the Health Sciences) class size now is just over 160 and will go to 175 by 1983. The class that graduated in 1980 yielded six Navy students and all six were selected for internships. Four are now serving operational tours, one is a resident in neurology, and one is hospitalized. The '81 graduating class included 23 Navy students all currently in internships: seven in basic medicine, seven in basic surgery, four in family practice, two in OB/GYN, two in pathology, and one in psychiatry. It is anticipated that graduates of the medical school will have career patterns as follows:

- 100 percent will serve Navy internships
- 90 percent will go with operational forces
- 10 percent will enter Navy residency programs immediately after internship
- 80 percent will commence residencies their second year out of school
- 10 percent will remain in aviation, submarine, and field medicine.

Recruiting is our next most important accession source. It is going reasonably well in most of our medical specialties, but this year's emphasis will again be on the surgical specialties. We have a goal of 173 medical officers. We desperately need your support.

We also need your help in rebuilding our Reserves. MED 02 will place increased emphasis this year on the Reserves. We are bringing in CAPT Ira Horton who will head the Reserve Division in BUMED. You must encourage all those medical officers being released from active duty to remain in the Reserves. DOD is currently proposing additional financial incentives to assist us in this program.

While on the subject of money, let's briefly review some of the pay issues. Last year's 11.7 percent across-the-board pay raise, the variable housing allowance, as well as this year's proposed 14.3 percent pay raise—all have positively affected the entire Navy. Whether we get a 12-14 percent targeted raise or across-the-board as of 1 October this year, is the only issue. Rest assured that the raise will fly in spite of other budget cuts. Although the various medical incentive special pays were not as much as we thought they would be, our total compensation has increased significantly.

Now just a few words about our other corps.

Our physician assistant training programs continue. We now have 303 billets and will meet those numbers this year. Retention has been excellent despite the clamor for commissioning. We probably will shut down one of the two training sites next summer and train only about 15-20 per year to meet our attrition. We will be increasing their program by another six to eight weeks.

Medical Service Corps

Emphasis is shifting from the basic credentialing process to the development of military-unique officer skills. Educational levels have risen markedly within the past decade, but formal familiarization training on Navy-unique requirements has fallen. Current efforts to counter this trend are:

- Patient Administrative Affairs Services Course (4 weeks);
- Fiscal and Supply Management Course (12 weeks);
- Similar tri-service courses are planned for C/B Warfare Defense;
- Utilization of combat related tri-service courses is intensifying, particularly in roles which complement medical officers' responsibilities. (e.g., Physical Therapy Musculoskeletal Screening Medical Effects of Nuclear Weapons, and Red Flag);
- Short medical-combat support courses are planned for general MSC officer orientation, FMF duty preparation, and career officer development;

• A 15 man-year out-service training program replaced the 36 man-year in-service hospital administration program at NSHS Bethesda in FY80;
• Service College (i.e., ICAF, Armed Forces Staff College, and Marine Corps Command and Staff School) quotas have been doubled since FY80;
• Input to the DPSC Medical Logistics Programs has resumed with two assignments into this six months program anticipated for FY82;

For the future, career officer management courses for newly augmented officers and middle grade officer selectees are being planned as are periodic readiness symposia for development and refinement of active and inactive officer development and force structure.

Nurse Corps

The Nurse Corps is at its authorized strength of 2,650 with a planned increase to 2,680 in FY82. Beginning in '83 additional small increases are anticipated as our overall strength of the Navy and Marine Corps increases.

Recruitment of qualified applicants has been and continues to be excellent. However, recruiting is being closely monitored due to the critical shortage of professional registered nurses in the civilian sector. The retention rate for the Nurse Corps has again improved with over 70 percent of our nurses remaining in the Navy upon completion of their initial obligation.

Nurse Corps applicants with baccalaureate level education continue to receive priority for commissioning. Currently 63.7 percent of all Nurse Corps officers hold baccalaureate or higher degrees in nursing.

Almost 10 percent of the Nurse Corps functions in the expanded primary care roles in family practice, adult health, pediatrics, OB/GYN, midwifery, and anesthesia.

In recognition of its needs to meet its commitment to the operating forces in any situation the Nurse Corps has initiated an operational readiness training course. The primary purpose of this course is to prepare Nurse Corps officers to plan and implement readiness training for nurses and hospital corpsmen at the local medical facilities. This is the most cost-effective and efficient method of reaching the maximum number of personnel.

Nurse Corps officers have served as tactical officers in the three C-4 courses taught during 1981. In addition, they have attended the Air Force's Red Flag exercises and courses in treatment of chemical and nuclear warfare casualties. The demand for professional nursing care, teaching, and supervision, has been growing constantly, particularly in the operational areas. Experience with Nurse Corps officers assigned to the Third FSSG in Okinawa was so positive that a Nurse Corps billet was requested and approved for the second FSSG. It is understood that the Marine Corps for FY83 POM has included approximately six Nurse Corps billets to be assigned to its hospital companies. A Nurse Corps billet has also been approved for the clinic at Diego Garcia. Nurse anesthetists are beginning to fill all of our carrier billets on a PCS basis and continue to cover carrier deployments in training exercises on a TAD basis.

Hospital Corps

The Hospital Corps community has 23,420 billets. They have 22,720 HMs onboard for 97 percent across the board manning. However, some of the NEC groups are experiencing serious shortages as you know. Your efforts are solicited to retain the skilled technicians and to encourage qualified personnel to apply for our "C" schools.

Quality control within the command is another critial step in improving our HM community. The convicted drug abusers and the professionally incompetent should be processed for removal from the HM rating and if necessary for administrative discharge.

Proper utilization of personnel has a direct effect on retention. All too often, our technicians are not utilized in the billets to which they were ordered for duty. You are encouraged to examine your own manpower authorizations regularly and request changes as necessary to reflect the actual long-term staffing requirements. In many areas, our HM quad zero billets can be assigned in support of teaching functions.

At the present time we are looking very intensively at increasing our course school training by another two weeks. As you know, this is a major effort on our part to improve the quality of our corpsmen as they come out of corps school. I think many of you know that the quality of our corpsmen coming from corps school over the past several years has fallen significantly.

These are all positive issues and initiatives that are planned for the coming year.

Despite the irritations, frustrations, and shortages, we have been able to show real progress. The reason of course is you and all your colleagues in the Medical Department, in every corps and in every job. We have every reason to be optimistic as we move into the 80s.

Mobilization

RADM Clinton H. Lowery, MC, USN
Assistant Chief for Health Care Programs
BUMED (MED 03)

This is not a drill. Will those words be the final sentence on that message you read on some Saturday afternoon after being called in for an emergency chiefs of service meeting? Is crisis management the only method that will take us from a peacetime defense readiness condition to a full-time mobilization status? And even if we must resort to crisis management

RADM Lowery

will there be sufficient time to accomplish the tasks required?

It is my intent today to convince you that mobilization at your field commands must begin today. Mobilization means a great deal more than going home and initiating a lot of readiness plans. Paper exercises will not suffice. Submission of well-organized and well-constructed plans is not enough. Mobilization which must begin now must start with a change of attitude. This change of attitude not only involves the staffs of our medical treatment facilities, but also our beneficiaries. Some way, somehow it will be your responsibility to get these people to begin to take our mobilization requirement seriously.

Lip service and fancy plans are not enough. These efforts will call for change, radical change. It will call for a change from what we want to do to what we must do. We must reset our priorities concerning all our health care efforts to insure that we are maximally supporting our active duty forces in their preparation for mobilization. It means intensification of our fleet liaison efforts. It means expeditiously solving all the fleet and Fleet Marine Forces health problems so that every man and woman is fully deployable. If they cannot be deployed for health reasons they must receive immediate evaluation so they can be removed from the system and replaced by those who can be deployed.

Our efforts must attempt to resolve those health problems of the active duty dependents which will impair the deployability of their sponsors. This requires a complete change of emphasis on our health care delivery system. It means that our care efforts must primarily be directed to those conditions that will result in improved effectiveness of our forces rather than what is professionally stimulating and attractive. Professional development programs and the professional satisfaction of our staffs must necessarily be sacrificed to some degree.

Consequently, this is the time for intense leadership and improved communications, not only with our own staffs and our line colleagues but also with our space available beneficiaries who may receive less attention because of these mobilization efforts.

Mobilization requires attitudinal changes that will result in a more corporate orientation of our entire health care delivery system. Our orientation as to where we fit into the Navy's overall mission requirements must be reassessed and reemphasized. With the necessity of our staffs having to face and solve the very pressing day-to-day problems of health care delivery, it is human nature for us in the Medical Department to lose our overall perspective. Not only is this true in the context of the Navy as a whole, but also within our own Navy Medical Department. Admittedly, a commanding officers' first concern is always his own command and a chief of service his own program, but understanding and cooperating to improve the overall readiness of our forces must be expected and accomplished by all our leaders. Each of you will be tasked to utilize mobilization stocks of medical equipment and supplies even though other types and forms may be more desired by your staff. This will be necessary if we are to have fresh, functional, and available supplies whenever and wherever we go to war. Standardization of these items with our sister services must be accomplished if we expect industry to be able to respond to our demands during mobilization.

Scarce training funds must be directed to insure that the right people receive the right training to enhance their combat effectiveness and their ability to survive in combat. It is anticipated that such efforts must be taken at the expense of educational efforts directed at pure professional development. The intensification of our on-the-job training of support personnel to insure their operational readiness must also be accomplished. This will necessarily interfere with their own and their teachers' support of patient care responsibilities. Again, it will be your responsibility to convince your staffs of the necessity of such efforts. Time is the prime commodity of any training program, but time must be found to train all our personnel in those skills needed for the combat environment even if other curricula must be sacrificed, and even if such changes might threaten certification requirements.

Our space available beneficiaries must be made to understand that changes are required now so that we can get on with our mobilization efforts.

Unlimited examples could be described to illustrate the necessity for attitudinal change and strong leadership if we are to get on with mobilization. Unfortunately, there is no cookbook method on how to prepare for mobilization. We do want to focus your attention on some of the areas to which your efforts must be directed. By the time we are finished I hope that we have increased your anxiety level and convinced you of the magnitude of the problem. The problem has a solution with everyone's cooperation.

Change from the tranquility of self-satisfying work efforts to the intensification of operational readiness of our own units and those we serve is

not pleasant. It is easier to deny that the need exists and to rationalize that our present efforts are what is really important. Unfortunately, if our mobilization efforts do not begin now there just will not be the time in the future to play catch-up ball. Good management continues to be necessary but now we particularly need outstanding and dedicated leadership. Ladies and gentlemen, this is no longer a drill.

GME-1 Trainee Selection: Facts and Figures

CDR Clarence B. Mohler, MSC, USN (Ret.)
Head, Procurement Programs and Accessions Branch, BUMED (MED 214)

I would like to say a few words about GME-1 statistics. Of 474 candidates from 108 medical and osteopathic schools throughout the country, 272 were selected as were 233 of the 417 candidates from the Armed Forces Health Professional Scholarship Program, 28 out of 28 students from the Uniformed Services University, 3 out of 3 Army students, 2 out of 3 Reserve medical officers, and 6 out of 19 civilians. Selections from all categories included 43 females.

In addition, we shall offer training to four Public Health Service students and, if they accept it, they will train as Public Health Service officers on the Public Health Service payroll.

There were 375 students who stated a prime preference for Navy training. There were 95 students of which 13 were selected who stated a prime preference. With the civilian students, four said they didn't care one way or the other. This leaves us with 184 scholarship students who were not selected for Navy programs. Because of their need to get into the civilian sector to seek training, we will advise them first of their nonselection. Notifications to those students who were selected will go out shortly after the nonselect letters are out.

At this time, we don't have a firm figure on the numbers of people who have asked for full deferments to seek specialty training in the civilian sector. This information will have to await another review of the application files. However, we may have as many as 37 candidates who will seek full deferment in the civilian sector in internal medicine, 22 candidates who will seek deferments in orthopedic surgery, and 29 in general surgery. Decisions concerning these selections or nonselections for deferments will be made sometime early next month after the specialty requirements in the future are generated and the GMO requirements for next summer are known.

Recruiting

CDR R.E. Newman, MSC, USN
Head, Medical Programs Branch
Navy Recruiting Command

My message is not different than that of my predecessor—we are all in this together. This week you will agonize over selecting the best candidates for a limited number of slots. You will spend an enormous amount of time intellectualizing the potential of one candidate as opposed to another. And, after all is said and done and the slate is presented to the Surgeon General you will still have concerns. And, after all this effort at the front door, we tend not to guard the back door.

During my short time in recruiting—this second time—I constantly hear the answer "I was never asked" to the question "Why didn't you stay?"

This coming recruiting year (October 1981 through September 1982) we will be recruiting for 160 physicians, the majority of which are in the specialty areas. As you can see your role unfold here, for every specialist you are successful in retaining, you consequently directly reduce the requirement for that goal. Moreover, the Navy physician you retain is by far less a liability than the new accession. We are all involved in recruiting tomorrow's Navy today. If we are able to retain the majority of our current people and selectively release those not pulling their weight, the job is certainly made much simpler.

CDR Mohler (Ret.)

My pitch today involves you in both new accessions and retention. From my perspective I see you as the single most influencing element in this chain of events. The new accession is viewing, for the first time, the role model he must emulate should he decide to enter our Navy. It is extremely important that your interviews deal with general items and not with assignments, job, or rank. These three areas get us into more trouble than any other single item discussed. I am confident our recruiters do a good job in sifting out the various administrative requirements; they depend on you to provide the professional expertise. Recruiters are very careful not to discuss the physician work environment.

The Navy Recruiting Command is a nationwide sales organization. We are headquartered in Arlington with a sales force organized into six large geographical areas. The areas are further broken down into 41 Navy re-

cruiting districts. Each district has one or more medical recruiters. These could be an MSC officer, nurse, hospital corpsman, line officer, or other enlisted. The assignment is at the discretion of the district commanding officer.

All recruiters attend the Recruiting Officers Management Orientation Course in Orlando. The course is four weeks in length and covers program requirements, qualifications, grade, and pay levels. The course is geared to sales techniques and therefore a large portion is in sales.

Our efforts during the past year have been very successful. We have made our goal in physician recruiting for the first time since the AVF started. The HPSP was very successful. Our recruiters provided sufficient applications to provide for a 4:1 ratio for selection. In addition, a significant number of applicants are processed for GME each year.

Now what does all this mean to you? As you can see, there is one key element missing in the recruiting process, the professional connection. The recruiter can tell the applicant all about the Navy but it takes your expertise to help close the sale. All the pieces of the puzzle must be there. Without your help we will be unable to achieve the numbers or the quality physicians we want in our Navy. Only you have the ability to determine the potential professionalism of the candidate. You know the appropriate questions to ask.

Remember, I said that we are salesmen. And like all other salesmen our success is measured *only* by production. If a recruiter doesn't make his goal, he is a failure; it is as simple as that. When a recruiter loses an applicant because a negative factor was introduced by someone in the recruiting process, it is extremely demoralizing, especially if the recruiter has spent a great deal of time with the applicant—flying he and she cross country and spending a significant amount of personal money. We have lost many applicants because of

CDR Newman

events occurring during the visit to the medical facilities. I won't go into the specific incidents but almost all could have been prevented by positive reaction to the visit. I will state, however, that there are three areas where you tread on thin ice during these interviews: the promise of a position at a facility where no billet exists, telling the applicant to hold out for a certain grade level that may or may not be possible under DOPMA and, finally, assigning as an interviewer someone who does not have a high opinion of the Navy.

Gentlemen, the Navy desperately needs your help in preventing these practices from continuing. Whenever possible and as long as our travel money holds out, we will continue the policy of bringing applicants to a facility where there might be a potential opening. However, it may well come to pass that we are forced to utilize the closest facility because of funding constraints. Should this happen in the case of applicants for training billets, we will take the applicant to the nearest hospital with that program and ask the program director there to interview the applicant and pass the information to the program director with the vacancy.

We look to you to provide the professional interview for our applicants. Examine their ability to practice their specialty and evaluate their competence to be a good member of the Navy Medical Corps. What is the applicant's motivation? Is he running from something? Is he enmeshed in legal problems? Can he communicate properly? We ask that you be very candid with the interview sheet you prepare. For your information, your interview sheets are destroyed as soon as the applicant is either selected or rejected. Please return the interview sheets to the recruiter as soon as possible. Often these will hold up an application. Please show the applicants the hospitality that you would expect when going to a strange hospital and insure that they are exposed to pro-Navy physicians. We ask that you not discuss rank, pay, or duty station with them. The Medical Corps detailers are limited to vacant authorized billets. We cannot discuss specific jobs with applicants until we get the OK from the detailer. Rank is based upon acceptable entry grade credit established by BUMED based upon DOD SECNAV Directives. Our recruiters are very careful to emphasize that their discussion of rank is only an estimate.

The same general aspects cover pay, especially with the new pay bill. Entry grade credit and credit for the new pay are entirely different. I am concerned that our ability to access experienced specialists as 0-5 or 0-6 is going to be significantly limited or even lost. Because of funding limitations we lost half of our PRN dollars last year. We are hopeful that won't be repeated. Be careful when talking with physicians who do not meet all the qualifications. Any waiver must be approved by CNO and some requests are not approved. Also be advised that the Navy no longer recruits alien physicians.

I would appreciate a program description of each training program that I can provide recruiters. This is something that can be shown to an applicant.

The Navy Recruiting Command will continue to support the Physician Recruiting Navy Program and will help support a vigorous exhibit program. □

Medical Contingency Response Units: Standards of Training and Evaluation

CDR Frederick M. Burkle, Jr., MC, USNR-R
LCDR Carole Jewett, NC, USNR-R

Effective January 1980, 101 NRMC Medical Contingency Response Units (MED CRU) were established nationwide. They were organized to provide a group of medical personnel, pretrained for rapid, additional patient care capability and triage at existing medical facilities ashore.

Personnel primarily came from disestablished Marine division and airwing units. Currently, MED CRU units provide medical support to all drilling naval and Marine Corps reservists. With mobilization, selected personnel or functional teams within a unit may be assigned to active Marine operational billets.

In keeping with the eclectic demands of MED CRU training, Active Duty for Training (ACDUTRA) will be conducted in the following sequence: one year at an appropriate naval regional medical center, and one year at an operational billet, Marine Corps base or specialized training course.

In all probability, several mobilized MED CRU units will find themselves working together at a common facility. Training and preparedness must meet specific standards universal to all MED CRU units. These standards must guarantee the mobilization facility that personnel will assume the functional demands without unnecessary lag time. Under rapid mobilization, any delays for orientation or additional training will be impossible. No personnel will be available to provide such needs.

Guidelines provided to MED CRU unit commanders state that "individual participants must be thoroughly familiar with hospital equipment and must provide fast and efficient medical care. . . . personnel must be trained in hospital and field medical procedures to ensure proper care and prompt return of combatant personnel to duty." (*1*) This training is to be provided whenever possible at military medical treatment facilities and/or as tactical training under field conditions with equipment similar to that used under actual combat conditions.

Indeed, naval reservists now, as in the past, represent a substantial segment of experienced medical, nursing, and corpsmen personnel. More vital are their proportionately higher rate of experience in previous combat medical situations.

Pre-ACDUTRA Planning

In the planning stages of ACDUTRA for FY80, MED CRU 920, Honolulu, HI, was faced with providing optimum training with a relatively new program design, limitations on travel for training funds, and affiliation with a regional medical center that had not, up to that time, been the primary mobilization facility for a large Reserve medical unit. It is fair to state that due to the recent creation of MED CRUs, the remaining 100 units also found themselves under similar conditions.

Under the stark realities of mobilization, duties would be primarily triage and combat casualty related. To apply this to a regional medical center concept, personnel had to be familiar with the physical plant, logistics involving the anticipated flow of patients, prehospital ambulance and emergency capabilities, emergency room equipment and duties, x-ray and laboratory functions and procedures, administrative functions, and triage.

The commanding officer and training officer developed specific training requirements based on the unit mission. These were presented to the unit for review. In addition, individual personnel provided the following:

CDR Burkle is Commanding Officer and LCDR Jewett is Training Officer of MED CRU 920 headquartered at the Naval Marine Corps Reserve Center, Honolulu, HI 96818.

• a list of their own previous active duty assignments,
• current skills and specialized medical, nursing, or technical training, and
• any individually assumed pre-ACDUTRA areas of weakness. This resulted in a more definitive list of training needs.

An introductory letter to the commanding officer, NRMC Honolulu provided the command a roster of MED CRU 920 personnel, their billet assignments, and the unit training needs. This led to a formal meeting with the NRMC personnel officer who set up specific meetings with NRMC department heads. Before these meetings, NRMC personnel admitted that the MED CRU mission and training needs were unfamiliar to them. The opportunity to present MED CRU needs led to a reorganization, happily initiated by the NRMC. This underscores the necessity for Reserve commands to provide the mobilization facility with specific requirements, especially on unit ACDUTRAs. Busy NRMCs are primed to provide reservists with service experience based on prevailing department vacancies in personnel.

NRMC Honolulu, sensing the enthusiasm and organization of MED CRU 920, redirected planning efforts toward training.

ACDUTRA Evaluation

Figure 1 summarizes the clinical-training experiences received on a rotation basis. To assure that training needs were met, an evaluation process was undertaken on a daily basis. Individual lectures, workshops, demonstrations and clinical experiences were critically rated (Figure 2).

Both MED CRU personnel and the supervisors at the NRMC completed additional evaluation forms at termination of ACDUTRA (Figures 3 and 4). With this evaluation process, training needs found deficient early in the course of ACDUTRA could be corrected.

The training officer rotated throughout the NRMC, coordinating training assignments and evaluations, trouble-shooting, and functioning as liaison with the NRMC personnel officer and Director of Clinical Services. This position proved indispensable.

Evaluation provided feedback on weaknesses that could be rectified during subsequent regular drill weekends. For example, the administrative experience was rated low by both MED CRU participants and by NRMC supervisors, suggesting that

FIGURE 1

Lectures and Demonstrations	Clinical Rotations
Orientation to NRMC	Emergency Room
Triage	Laboratory
Wound Care	Pharmacy
Aseptic Technique	Medical Records and Administration
Emergency Casting and Splinting	X-ray (completed by one Reserve x-ray tech)
Emergency Laboratory Procedures	Ambulance Run
Emergency Room Equipment and Procedures	
Head, Thoracic, and Abdominal Injuries	
Injections and Immunizations	
Vital Signs	
Preventive Medicine Unit Orientation	
Ambulance Orientation	
EKG and Defibrillator Demonstration	

FIGURE 2.* MED CRU 920 ACDUTRA

Evaluation Packet

The purpose of an ACDUTRA evaluation is to provide personal, Unit and Training Command feedback on the process of training received and constructively aid in the development of improved modes of training.

The mission of MED CRUs are:

1. To provide an organized group of medical personnel pretrained to provide rapid additional patient care capability and triage at existing medical facilities ashore.

2. Under a limited call-up, we serve as a ready resource of medical manpower for immediate response to disasters in CONUS.

Please keep this in mind when evaluating ACDUTRA.

Date: _____

Topic or Clinic: _____

Primary Supervisor or Lecturer: _____

1 to 5 Scale (1 = lowest rating, 3 = average rating, 5 = highest rating)

How would you rate this session in terms of Unit mission needs?
1 2 3 4 5

How would you rate this session in terms of your individual training needs? 1 2 3 4 5

How do you feel this session prepared you for your Unit mission?
1 2 3 4 5

Would you recommend such a session for MED CRU ACDUTRA training in the future? 1 2 3 4 5

General and Specific Comments:

Signature (Optional) _____ Rate/Rank _____

*(Condensed for illustration purposes)

ongoing NRMC administrative functions had less applicability to mobilization where triage and casualty administrative chores differed markedly. Suturing skills required improvement. Several unit members felt they lacked the necessary confidence in the emergency room. Triage concepts needed clarification.

Overall, the NRMC felt the strength of the ACDUTRA experience was in the organization. "Although there have been numerous reservists assigned to the NRMC in past years, this is the first time there has been such extensive preplanning, setting of objectives, and supervision of the reservist group," observed one supervisor. All emphasized that ACDUTRA proved to be a mutual learning experience both for the NRMC and the unit.

Summary

The results of MED CRU 920 ACDUTRA experience suggest that:

- Organization and attention to specific training needs was most appreciated by the host NRMC.
- Reserve unit enthusiasm for learning is contagious, leading to a reciprocal effort and enthusiasm from the host NRMC.
- Evaluation should be an ongoing function of all ACDUTRAs, due to the fact that training, not service is the primary function.
- Standards of training for all 101 MED CRU units are necessary. With mobilization, units will be working together at similar facilities, confronting common medical situations.

Reference

1. CNAVRESINST 1510.7A, Section V, Chapter 32, Annex E. □

FIGURE 3. MED CRU 920 ACDUTRA

1. How would you rate the overall success of this ACDUTRA?
1 2 3 4 5

Comments:

2. How do you rate the ACDUTRA experience in preparing you personally to meet the Unit mission needs? 1 2 3 4 5

Comments:

3. How would you rate your preparedness now to respond to mobilization within a NRMC? 1 2 3 4 5

Comments:

4. What recommendations in training changes, if any, would you make for future NRMC/MED CRU ACDUTRAs?

FIGURE 4. MED CRU 920

ACDUTRA evaluation for NRMC supervisors

Unit Mission:

1. To provide an organized group of medical personnel pretrained to provide rapid additional patient care capability and triage at existing medical facilities ashore.

2. Under a limited call-up, we serve as a ready resource of medical manpower for immediate response to disaster in CONUS.

Scale 1-5 (1 = lowest rating, 3 = average, 5 = highest rating)

1. How would you rate the overall success of this ACDUTRA, keeping in mind the mission needs of MED CRU 920? 1 2 3 4 5

Comments:

2. How would you rate the preparedness of MED CRU 920 to fill expected duties at NRMC Honolulu if mobilization were to occur?
1 2 3 4 5

Comments:

3. What recommendations in training changes, if any, would you make for future NRMC /MED CRU ACDUTRAs?

4. General or Specific Comments:

Signature: _____

Rank/Rate: _____

Percutaneous Transluminal Coronary Angioplasty

LCDR Peder M. Shea, MC, USN Kirk Peterson, M.D. CAPT W.V.R. Vieweg, MC, USN

Since 1964, when Dotter and Judkins (*1*) described a special dilating catheter for transluminal compression of localized atherosclerosis, there has been interest in applying this technique to coronary atherosclerotic heart disease. (*2*) In 1977 Gruntzig performed the first nonoperative transluminal angioplasty of the coronary arteries in man. Since then, the procedure has gained popularity particularly in the area of single vessel coronary artery disease. We have begun performing this procedure at NRMC San Diego. An illustrative case is presented.

Patient Report

A 59-year-old man had an 11-month history of angina pectoris which progressed despite the use of Inderal and nitrates. An exercise stress test was performed which was positive in Stage II of the Bruce protocol with 1.5 mm planar ST segment depression.

An isolated 80 percent lesion in the left anterior descending coronary artery proximal to the first septal perforator was seen at catheterization (Figure 1). After pretreating with aspirin for several days, the patient was taken to the catheterization laboratory and under the cover of heparin and nitrates, percutaneous transluminal coronary angioplasty was performed. Within three days following the procedure, a thallium exercise stress test was performed during which the patient reached a heart rate of 132 beats per minute

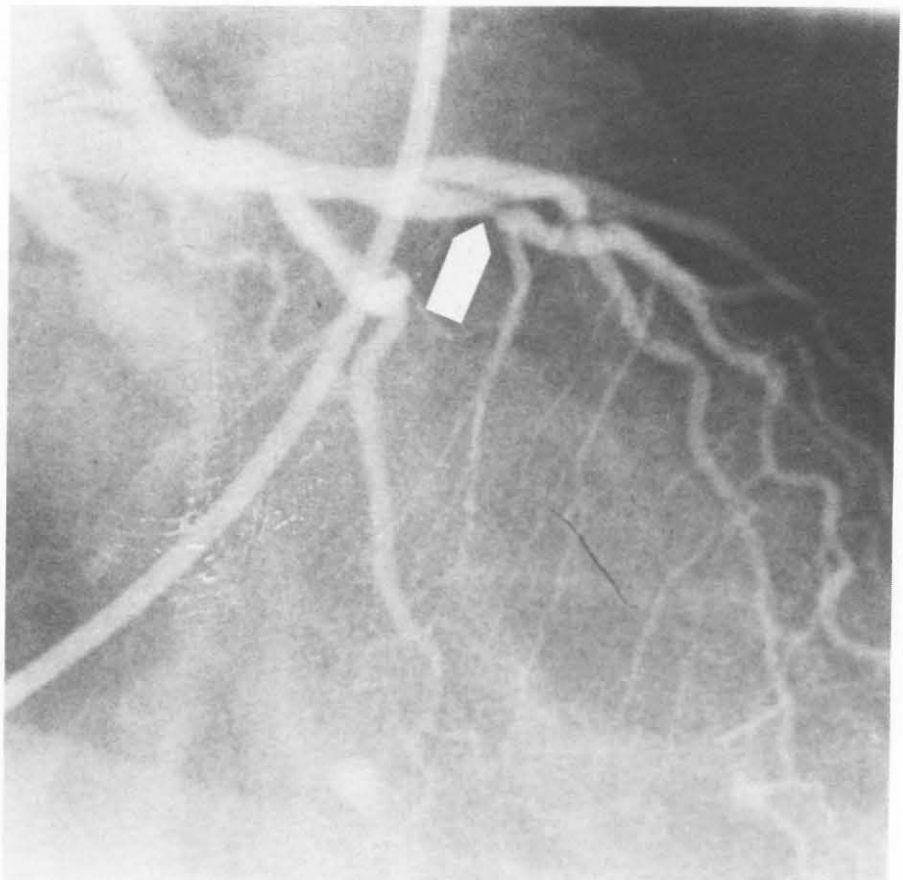


FIGURE 1. Before catheterization: An 80 percent lesion in left anterior descending artery.

Dr. Shea is Director of the Catheterization Laboratory, Cardiology Branch, NRMC San Diego 92134. Dr. Peterson is Professor of Medicine at the University of California, San Diego. When this article was written, Dr. Vieweg was Chief of Cardiology, NRMC San Diego.

without any electrocardiographic changes or perfusion defects. After three months, a repeat thallium exercise stress test was performed to a maximum heart rate of 172 beats per minute without any symptoms, electrocardiographic changes, or perfusion defects. Repeat coronary arteriography was performed revealing no more than 40 percent lesion in the left anterior descending coronary artery (Figure 2).

Since the date of the first cardiac catheterization, the patient has missed approximately three weeks of work due to diagnostic procedures. Otherwise, he is fully employed and experiencing no symptoms.

Discussion

Percutaneous transluminal angioplasty is a new technique in the cardiologist's armamentarium in dealing with atherosclerotic coronary artery disease. This procedure was revolutionized by the innovative efforts of Gruntzig and Myler who developed a balloon dilating system to meet various specific requirements. The dilating catheter must be sufficiently rigid to allow for several atmospheres of pressure without danger of rupture as well as sufficiently pliable to achieve a remarkably small diameter in order to pass critical narrowings of the coronary arteries. A hydraulic system had to be developed capable of carefully controlled expansion of the balloon and prompt, complete, and reliable evacuation following each dilatation. Guidelines are based on clinical and anatomical features for the proper selection of patients who are likely to be improved by percutaneous transluminal coronary angioplasty. A history of angina pectoris of recent onset suggests that the coronary arterial lesion will not be calcified and that myocardial performance is well preserved. Anatomically, the patient should have single vessel coronary artery disease of greater than 70 percent stenosis and a discrete proximal lesion. The lesion should not be calcified and should not be present near bifurcation of a major vessel in order to avoid damage to side vessels during the dilatation. Finally, as the clinical experience has been acquired, it appears that 10 percent of the individuals may require emergency coronary artery bypass surgery following attempted transluminal angioplasty. Thus, the patient must be an acceptable candidate for bypass surgery. The experience with left main coronary disease has been disappointing to date and this lesion constitutes a relative contraindication to coronary angioplasty. Likewise, a completely obstructed or heavily calcified lesion is a relative contraindication.

Using the battery of clinical and anatomical features to select favorable patients, 1,000 patients have

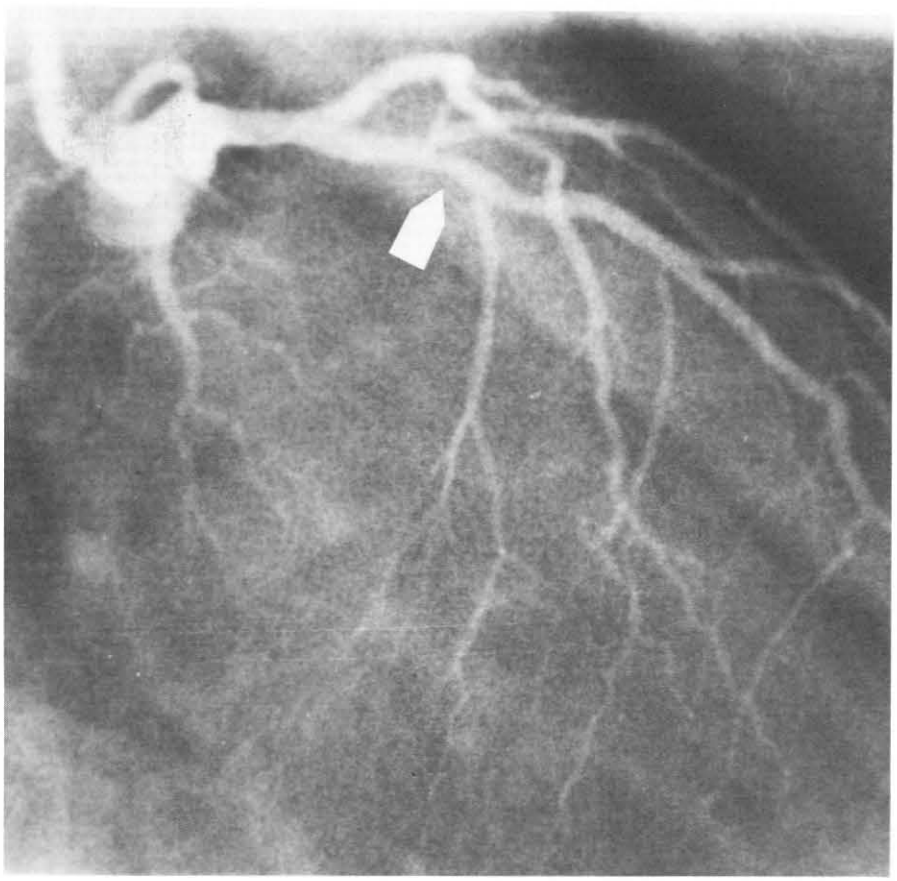


FIGURE 2. After procedure: No more than a 40 percent lesion remains.

been entered into the National Heart, Lung and Blood Institute Registry on coronary angioplasty. Of this population, 64 percent of those patients with left anterior descending obstructions and 35 percent with circumflex obstructions were successfully crossed by the dilating catheter. Once crossed, approximately 70 percent of lesions were successfully dilated regardless of the location of the lesion. Complications included myocardial infarction in five percent of patients and emergency coronary artery bypass surgery in six percent of patients. The overall mortality was 1.3 percent and compared favorably to surgical therapy of single vessel disease. A followup of one year has been obtained in 91 patients of which 65 were successfully dilated. Of these 65 patients, 83 percent remained improved, 7 percent are unchanged or worse, 4 percent have had repeat coronary angioplasty, and 5 percent have gone on to bypass surgery. Of the 24 patients who were not successfully dilated, 18 have gone on to elective coronary artery bypass surgery. In summary, it appears that early clinical experience has shown that angioplasty can relieve angina pectoris with acceptable risk in a majority of patients and the complication rate compares favorably to that of coronary artery bypass surgery.

In a recent review on single vessel coronary artery disease, Vieweg et al, (*3*) looked at 500 patients with angina pectoris undergoing coronary arteriography and found 103 patients with single vessel coronary artery disease. There were 55 left anterior descending lesions, 12 circumflex lesions, and 36 right coronary lesions. The mean age of the 103 patients with single vessel disease was 46 years which, although differing little from the mean age of 49 years for the overall population of 500 patients, does emphasize that single vessel disease occurs more commonly in younger patients. Hamby and Katz (*4*) reported a retrospective assessment of the potential impact of percutaneous transluminal coronary angioplasty and found that the younger patients were more likely to have coronary artery disease amenable to transluminal coronary angioplasty.

In conclusion, preliminary results suggest that properly selected patients with ischemic heart disease and disabling symptoms in spite of medical management may be returned to an active lifestyle following percutaneous transluminal coronary angioplasty. This technique allows for minimal convalescence and almost immediate return to full employment. Given the younger patients found in the active duty military population, it is likely that single vessel coronary artery disease will be seen among this population more often than in the general population and, if properly managed, the patient can promptly return to an active duty status.

References

1. Dotter CT, Judkins MP: Transluminal treatment of arteriosclerotic obstruction: Description of a new technic and a preliminary report of its application. *Circulation* 30:654-670, 1964.

2. Gruntzig AR, Senning A, Siegenthaler WE: Nonoperative dilatation of coronary artery stenosis: Percutaneous transluminal coronary angioplasty. *N Engl J Med* 301:61-68, 1979.

3. Vieweg WVR, Warren SE, Alpert JS, Hagan AD: The distribution and severity of coronary artery disease and left ventricular dysfunction among patients with single coronary artery disease and angina pectoris. *Clin Cardiol* 3:241-245, 1980.

4. Hamby RI, Katz S: Percutaneous transluminal coronary angioplasty: Its potential impact on surgery for coronary artery disease. *Am J Cardiol* 45:1161-1166, 1980. □

NITROFURANTOIN

Information published in the *Annals* of *Internal Medicine* in January of 1980 strongly implicated nitrofurantoin as the causative agent in a drug-induced hepatitis. The patients reported to date have all been female, generally over age 30, on a dose exceeding 50 mg per day, and most were on the medication for greater than 6 months. Most patients were on nitrofurantoin to control recurrent cystitis. Two patients went on to die of necrotizing hepatitis, but most experienced resolution of symptoms and a return to normal of elevated liver enzymes after the drug was discontinued. In light of this information, it would seem prudent for Navy physicians when starting female patients on nitrofurantoin for chronic suppression of recurrent cystitis to do the following:

- Get baseline liver enzymes prior to starting the nitrofurantoin, at six weeks and six months after starting therapy, and semiannually thereafter.
- Stop the nitrofurantoin for any elevation of the liver enzymes over the baseline.
- Obtain an ANA and CPK when the nitrofurantoin is discontinued as these have been elevated in the majority of patients with nitrofurantoin induced hepatitis. Other features include a low albumin and hypergammaglobulinemia. Biopsies show a "lipoin" chronic hepatitis.
- Obtain liver enzymes till they return to normal, usually 6 weeks to 6 months.

IN MEMORIAM

CAPT *Leo J. Elsasser,* MSC, USN (Ret.), the second Chief of the Navy Medical Service Corps, died 16 Oct 1981.

Born in Omaha, NE, CAPT Elsasser enlisted in the U.S. Navy as a hospital apprentice on 29 Sept 1930 and progressed through the enlisted ranks, being promoted to Hospital Corps warrant officer on 9 March 1942. He later received a temporary commission in the Hospital Corps and was promoted to lieutenant on 1 July 1944. He was among those who were originally appointed Lieutenant, Medical Service Corps, U.S. Navy, as a result of the 1947 Army-Navy Medical Service Corps Act.

CAPT Elsasser's assignments included Director of Medical Records Systems, BUMED, Washington, DC; Administrative Officer, Naval Hospitals Great Lakes, IL, and San Diego, CA; Director, Hospital Administration Division, BUMED; and Commanding Officer, Naval School of Hospital Administration, NNMC Bethesda, MD.

CAPT Elsasser was selected as Chief of the Navy Medical Service Corps in September 1958. He served in that position until his retirement from active duty in October 1962.

NEW OPERATIONAL ENTOMOLOGY TRAINING COURSE

The Navy Disease Vector Ecology and Control Center, Jacksonville, FL, has quotas available for a new course in Operational Entomology Training to be given 11-22 Jan, 10-21 May, and 9-20 Aug 1982. Students in this course will receive advanced training in applied vector-borne disease control that may be required in operational entomological support of disaster relief, combat, or other contingency operations.

The course is primarily designed for active duty preventive medicine technicians, environmental health officers, epidemiologists, and entomologists. Quotas are also available for Medical Department personnel assigned to Naval Reserve preventive medicine units.

Topics to be covered during the course include:

- Vector-borne disease profiles on malaria, encephalitis, filariasis, leishmaniasis, onchocerciasis, trypanosomiasis, etc.
- Field epidemiology principles for vector-borne diseases
- Contingency vector control principles
- Ground vector control operations and equipment
- Aerial dispersal in vector control operations
- Field vector surveillance techniques
- Laboratory identification of principal vectors
- Emergency vector surveillance and control procedures
- Contingency planning and problem solving

Prospective students should request local funding. Limited funding may be available from the Naval Health Services Education and Training Command (HSETC).

Approval for attendance and funding for Naval Reserve personnel are in accordance with current policies governing active duty for training for naval reservists. Requests for quotas should be made through the Chief of Naval Reserve.

Quarters may or may not be available at NAS Jacksonville. Reservations may be made by calling the U.O.P.H. at Autovon 942-3138/3427, Commercial (904) 772-3138, or the U.E.P.H. at Autovon 942-3537, Commercial (904) 772-3537. Messing is not available for officers, but is available to enlisted personnel in quarters.

For quotas, course outlines, and future course dates contact DVECC, Jacksonville, Autovon 942-2428, Commercial (904) 772-2428.

EXHIBIT AT THE USS CONSTITUTION MUSEUM

In connection with celebrating the 200th anniversary of its founding in 1781, the Massachusetts Medical Society has funded an exhibition depicting naval medicine in the early 1800s. In addition, there are frequent showings of a short film called *Honors of War,* based largely on the diary of the ship's surgeon the day "Old Ironsides" battled HMS *Java.* The show and exhibition at the USS *Constitution* Museum, Charlestown Navy Yard, MA, has proved highly popular and will run for several years.

WANTED—CLINICAL NOTES

U.S. Navy Medicine needs articles for the Clinical Notes section. Submissions should be no longer than 1,500 words, double-spaced, and if possible, contain references and black-and-white photos.

Physicians, dentists, and other practitioners should have manuscripts cleared for professional accuracy prior to submission.

INDEX: Vol. 72, No. 1-12, January-December 1981

NOTE: Figures indicate the issue and page in Volume 72 of *U.S. Navy Medicine*. For example, 5:1 indicates that the article may be found in issue No. 5, page 1.

☆ U.S. GOVERNMENT PRINTING OFFICE: 1981—361-323/110

U.S. NAVAL PUBLICATIONS and FORMS CENTER
ATTN: CODE 306
5801 Tabor Avenue
Philadelphia, Pa. 19120
Official Business

POSTAGE AND FEES PAID
DEPARTMENT OF THE NAVY
DoD-316

CONTROLLED CIRCULATION RATE